

AMENDMENTS TO THE ABSTRACT:

Please amend the Abstract as follows:

~~The present invention provides a~~ A data processing apparatus and method for computing ~~processor computes~~ an absolute difference between portions of first and second data elements. The ~~data processing apparatus comprises processing logic operable~~ configured to perform a data processing operation on first and second data elements, the processing logic comprising comparison logic operable configured to compare at At least a part of the first and second data elements are compared in order to determine which of the first and second data elements data element is a larger data element. The comparison logic is operable configured to produce a comparison result which has a A first comparison result value is produced if the first data element is the larger data element and a second comparison result value if the second data element is the larger data element. The processing logic further comprises ~~absolute difference logic operable~~ configured to compute an An absolute difference is computed between a portion of the first and second data element element and a portion of the second data element. The absolute difference logic comprises adder logic operable configured to invert one One of the portions is inverted to produce an inverted data element portion, and to add the inverted data element portion added to the other of the portions portion and to the comparison result received from the comparison logic in order to produce an intermediate result. Further, the absolute difference logic comprises output logic operable configured to generate an inverted version of the intermediate result and to output as the An absolute difference is provided with improved speed either as the intermediate result or the an inverted version of the intermediate result dependent on the comparison result. Through use of the present invention, an absolute difference can be computed without the need to provide logic to swap the ordering of the first and second data element portions prior to the addition dependent on the result of the comparison.

Accordingly, a significant improvement in speed of determination of the absolute difference can be realised.